

IN THE DRAWINGS

The attached sheets of drawings include changes to FIGs. 18, 30, and 37. These sheets, which include FIGs. 18 and 19, 30 and 31, and 36-38, respectively, replace the original sheets including FIGs. 18 and 19, 30 and 31, and 36-38.

Attachment: Replacement Sheets (3 sheets)

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-56 are pending in the present application. Claims 1-20 and 54 are amended by the present amendment.

In the outstanding Office Action, Claims 9, 21-53, and 55-56 were withdrawn from consideration; the title was objected to; the specification was objected to; the drawings were objected to; Claims 1, 6-8, 10, 12-16, 18-20, and 54 were objected to; Claims 1-8, 10-20, and 54 were rejected under 35 U.S.C. § 112, second paragraph; and Claims 1-8, 10-20, and 54 were rejected under 35 U.S.C. § 102(b) as anticipated by Zhu (U.S. Patent No. 5,930,164).

Regarding the objection to the title, the title has been amended as suggested by the outstanding Office Action. No new matter has been added. Thus, it is respectfully requested this objection be withdrawn.

Regarding the objection to the specification, the specification has been amended as suggested by the outstanding Office Action. No new matter has been added. Thus, it is respectfully requested this objection be withdrawn.

Regarding the objection to the drawings, Figures 18, 30, and 37 are amended as suggested in the outstanding Office Action. No new matter has been added. Thus, it is respectfully requested this objection be withdrawn.

Regarding the objection to Claims 1, 6-8, 10, 12-16, 18-20, and 54, Claims 1, 6-8, 10, 12-16, 18-20, and 54 have been amended as suggested by the outstanding Office Action. In addition, Claims 1-20 and 54 have been amended to correct minor informalities. No new matter has been added. Thus, it is respectfully requested this objection be withdrawn.

Regarding the rejection of Claims 1-8, 10-20, and 54 under 35 U.S.C. § 112, second paragraph, Claim 1 has been amended to recite that first and second TMR layers are located between first and second current driving lines, as shown in Figure 12 for example. In addition, Claim 17 has been amended to depend from Claim 3 instead of Claim 1. No new matter has been added. Accordingly, it is respectfully requested this rejection be withdrawn.

Regarding the rejection to Claims 1-8, 10-20, and 54 under 35 U.S.C. § 102(b) as anticipated by Zhu, independent Claim 1 has been amended to recite:

said first and second TMR layers are located between said first and second current driving lines; and  
a value of a current of said first current driving line is greater than that of said second current driving line when data is written in said second TMR layer, and a value of a current of said second current driving line is greater than that of said first current driving line when data is written in said first TMR layer.

The claim amendments find support in Figure 12 and its corresponding description in the specification. No new matter has been added.

Briefly recapitulating, amended Claim 1 is directed to a magnetic random access memory that includes, *inter alia*, first and second current driving lines and first and second TMR layers. The first and second TMR layers are located between the first and second current driving lines. A value of a current of the first current driving line is greater than that of the second current driving line when data is written in the second TMR layer, and a value of a current of the second current driving line is greater than that of the first current driving line when data is written in the first TMR layer. In a non-limiting example, Figure 12 shows the first TMR layer TMR1, the second TMR layer TMR2, and the first and second current driving lines (not labeled).

Turning to the applied art, Zhu shows in Figure 3 memory cells 34 and 35, a word line W2, and a digit line D1. However, Zhu does not teach or suggest that the memory cells 34

and 35 are located between the word line and the digit line as required by amended Claim 1. To the contrary, Zhu shows that the memory cells 34 and 35 are formed outside a space defined by the word line W2 and the digit line D1. In addition, Zhu does not teach or suggest the claimed values of the currents for writing data in the TMR layers.

Accordingly, it is respectfully submitted that amended Claim 1 and each of the claims depending therefrom patentably define over Zhu.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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